

veneer - log production and receipts, north central region 1972

James E. Blyth

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VENEER-LOG PRODUCTION AND RECEIPTS,

NORTH CENTRAL REGION, 1972

James E. Blyth

This report of 1972 veneer-log production and receipts¹ in the North Central Region is divided into two sections--Lake States (Minnesota, Wisconsin, and Michigan) and Central States (Indiana, Illinois, Iowa, and Missouri)--because different species are grown and used as veneer logs in each area. Moreover, less information can be released about the Central States because more detailed data would reveal the operations of individual mills. Export data are reported for Canada but not for other countries.

All but one veneer mill using North Central Region timber in 1972 reported their veneer-log receipts by species and State of origin. Their cooperation is gratefully acknowledged. Receipts were estimated for the nonresponding mill. Two large mills are not included in this report to avoid disclosure of their operations (fig. 1); neither had been included in previous reports.

Of the 57 active veneer mills in the Region in 1972, 38 were standard² veneer mills and 19 were container³ veneer mills. From 1970 to 1972, six standard veneer mills and three container veneer mills closed; one standard veneer mill began operations. Another standard veneer mill closed during 1972.

¹Production is the volume of veneer logs cut from a specific area; receipts are the volume of veneer logs received by mills in a specific area regardless of geographic source.

²Commercial, face, and specialty veneer mills that manufacture veneer used in doorskins, furniture, wall panels, specialty plywood, and similar items.

³Mills that manufacture veneers used in boxes, crates, packing cases, and other wood veneer containers.

LAKE STATES

Since 1948, Lake States veneer-log production has been declining, although it revived slightly in 1972 (fig 2). Many mills have closed and veneer-log production is now less than two-fifths of the 1948 total. The container veneer industry has been hit hard by substitution of materials such as plastics and paperboard. Container veneer-log production in 1972 was less than one-tenth the volume in 1948. Standard veneer-log production fell sharply from 1948 to 1950, but has been stable since then. The standard veneer industry is plagued by foreign competition and simulated natural wood finishes on plastic, vinyl, hardboard, and nonfigured plywood panels.

Production

Veneer-log production in the Lake States in 1972 was 42.2 million board feet, 7.8 million board feet higher than in 1970. Much of the volume (38.0 million board feet) was in standard veneer logs; the remainder was in container veneer logs.

For the first time, red oak surpassed hard maple as the principal species cut (fig. 3). Spanish-Mediterranean furniture was in great demand for home furnishings, and oak is the preferred species. Other major species harvested were yellow birch and elm. These four species constituted 69 percent of the total harvest in the Lake States.

Hard maple may become the dominant species again. During 1972, the Japanese bowling industry expanded rapidly and large quantities of high-quality hard maple were exported to Japan for bowling alley bedstock. Lower quality maple is being shipped to Japan for bowling pins. As the Japanese bowling alley boom subsides, more normal market conditions may allow domestic hard maple veneer markets to expand more rapidly.

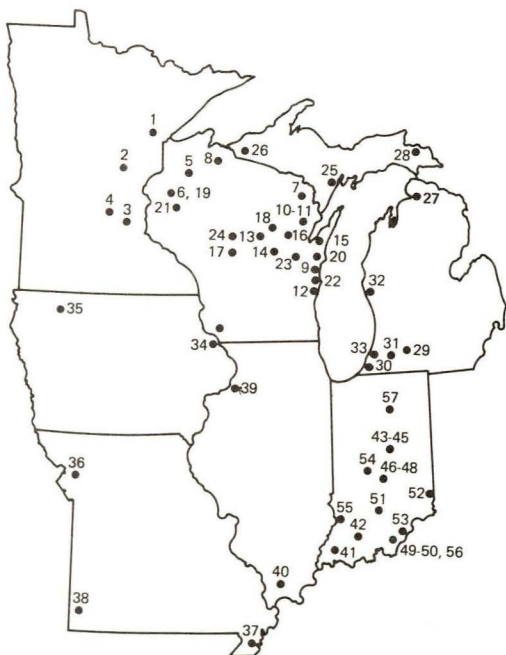


Figure 1.--Location of active veneer mills in the North Central Region, 1972.

MINNESOTA			
Type of mill	Number	Name of mill	Location
Standard	1	Diamond National Co. ¹	Cloquet
	2	Wahkon Veneer Mills	Wahkon
Container	3	Allen Wood Products, Inc.	Hopkins
	4	Elk River Box Co.	Elk River
WISCONSIN			
Standard	5	Birchwood Lumber & Veneer Co.	Birchwood
	6	Birchwood Mfg. Co.	Rice Lake
	7	Goodman Veneer Mill, UOP	Goodman
	8	Mellen Veneer Mill, UOP	Mellen
	9	Eggers Plywood Co.	Two Rivers
	10	Gillett Veneer & Plywood Co.	Gillett
	11	Linwood, Inc.	Gillett
	12	Larson Plywood Co., Inc.	Sheboygan
	13	Hatley Veneer Co., Inc.	Hatley
	14	Marion Plywood Corp.	Marion
	15	Champion International	Algoma
	16	Weber Veneer & Plywood Co.	Shawano
	17	Weyerhaeuser Co.	Marshfield
	18	Wisconsin Timber & Land Co.	Mattoon
Container	19	Brunette Box & Veneer	Rice Lake
	20	Dufek Mfg. Co.	Denmark
	21	Ebner Box Factory	Cameron
	22	Konz Container Co.	Howard Grove
	23	Seymour Woodenware Co.	Seymour
	24	Standard Container Co.	Edgar
MICHIGAN			
Standard	25	Anthony & Co.	Escanaba
	26	Iron Wood Products ¹	Besemer
	27	Manthei Bros.	Petoskey
	28	Soo Hardwoods, Inc.	Sault Ste. Marie
Container	29	A. C. Hensel Mfg. Co.	Augusta
	30	Nelson R. Anderson Co.	Stevensville
	31	Fruit Growers Package Co.	Paw Paw
	32	Michigan Crate & Basket	Shelby
	33	Riverside Package Co.	Riverside
IOWA			
Standard	34	R. S. Bacon Veneer Co.	Dubuque
	35	Iowa Veneers, Inc.	Spencer
MISSOURI			
Standard	36	Missouri Valley Walnut Co.	St. Joseph
Container	37	Betz Tipton Veneer Co.	Caruthersville
	38	Crumbliss Wood Products	Neosho
ILLINOIS			
Standard	39	Swords Veneer & Lumber Co.	Rock Island
Container	40	The Martin Bros. Container & Timber Products, Inc.	Karnak
INDIANA			
Standard	41	Evansville Veneer Co.	Evansville
	42	Jasper Veneer Mills	Jasper
	43	Central Veneer, Inc.	Indianapolis
	44	Curry Miller Veneers, Inc.	Indianapolis
	45	Indiana Veneers, Inc.	Indianapolis
	46	David R. Webb Co.	Edinburg
	47	Amos Thompson Corp	Edinburg
	48	Hill Bros. Veneer Co., Inc.	Edinburg
	49	B. L. Curry & Sons	New Albany
	50	Chester B. Stem, Inc.	New Albany
	51	National Veneer & Lumber Co.	Seymour
	52	Pierson-Holowell Co., Inc.	Lawrenceburg
	53	Roberts & Strack Veneer Co.	Clarksville
	54	Theising Veneer Co., Inc.	Mooreville
Container	55	Farrell Box Co., Inc.	Decker
	56	New Albany Box & Basket Co., Inc.	New Albany
	57	W. C. Redmon Sons, Inc.	Peru

¹Receipts not recorded to avoid disclosure of operations of these mills.

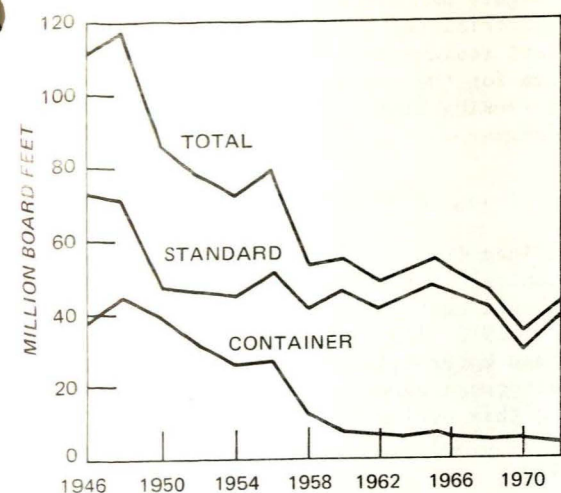


Figure 2.--Veneer-log production by year and type of industry, Lake States, 1946-1972.

The major changes in the veneer-log harvest between 1972 and 1970 were as follows:

Species	Increase, 1970-1972	
	(Thousand board feet)	(Percent)
Red oak	2,873	42
Elm	1,323	35
Aspen	1,286	101
Walnut	817	146
Beech	772	263
Yellow birch	721	16

Many mills (76), primarily in the Midwest, used Lake States veneer logs in 1972. Of these, 28 used hard maple logs, 22 used red oak, 22 used elm, and 12 used yellow birch.

Wisconsin harvested 19.5 million board feet of logs in 1972 compared with only 15.8 million board feet in 1970. All but 7 percent was consumed in Wisconsin. Leading species harvested were red oak (7.1 million board feet), elm (3.4 million), and aspen (2.1 million). Walnut and butternut were the principal species shipped to other States.

Michigan produced 18.5 million board feet of logs: 10.8 million board feet went to Wisconsin, and 4.6 million board feet was retained in Michigan. Hard maple (39 percent) and yellow birch (23 percent) were the prime species cut for veneer logs.

Eighty-two percent of the Minnesota harvest of 4.2 million board feet was consumed in Wisconsin. The important species cut in terms of volume were red oak, elm, basswood, and cottonwood.

The Lake States exported 4.5 million board feet of veneer logs in 1972 (52 percent more than in 1970), primarily to Indiana (51 percent), Ohio (15 percent), and Canada (14 percent). Michigan supplied two-thirds of the export volume; hard maple and walnut were the main species exported.

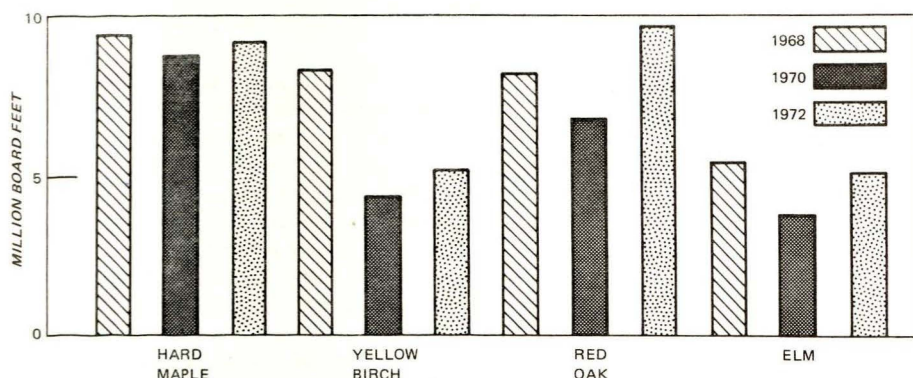


Figure 3.--Veneer-log production in the Lake States by major species, 1968, 1970, and 1972.

Mill Receipts

Lake States mills procured 42.3 million board feet of veneer logs in 1972, a gain of 5.3 million board feet from 1970. Imports from other States and Canada dropped 1 million board feet between 1970 and 1972. Hard maple, red oak, and yellow birch were in greater demand than in 1970 because furniture, door, cabinet, and paneling markets were excellent in 1972. Elm was also heavily used, partly because Dutch elm disease is spreading in the Lake States and high-quality trees are being salvaged for veneer.

Veneer mills are especially abundant in northeastern Wisconsin where several large mills produce high-quality face and specialty veneers. Wisconsin mills received 36.5 million board feet of veneer logs, surpassing 1970 by 6.6 million board feet. Nearly all (99 percent) of the red oak veneer log volume received in the Lake States was consumed in Wisconsin. Fifty percent of the log requirements in Wisconsin came from outside the State: Michigan (30 percent), Minnesota (9 percent), Canada (7 percent), and Iowa (4 percent). Michigan was a prime source of hard maple and yellow birch logs.

Michigan veneer plants received 5.3 million board feet of veneer logs, down 1.4 million board feet from 1970. Hard maple, yellow birch, and paper birch are the significant species used. Michigan forests supplied 86 percent of the veneer-log requirements in the State.

Minnesota's mills acquired half a million board feet of veneer logs, a slight increase from 1970.

Plant Residue⁴

Less than 3 percent of the wood residue generated at veneer mills in the Lake States is disposed of as waste in 1972. Important uses for coarse residue were in fiber products (62 percent) and as industrial fuel (21 percent). These were the major uses for fine residues, also. Nearly half (48 percent) of the total wood residue is used for fiber products.

⁴Plant residue at veneer mills is classed as: (1) bark; (2) coarse (wood)--suitable for chipping, such as veneer cores; or (3) fine (wood)--not suitable for chipping, such as veneer clippings.

Eighty percent of the bark was burned as industrial fuel. Consequently, disposal of plant residue does not appear to be a problem for the veneer industry, except for mills seeking higher value uses for their residue.

CENTRAL STATES

Since 1956, output of veneer logs in the Central States has ranged from 39.9 million board feet in 1960 to 23.5 million board feet in 1970 (fig. 4). The overall trend has been moderately downward. Harvesting of cottonwood veneer logs dropped sharply during this period because container veneer markets, a major market for cottonwood, contracted.

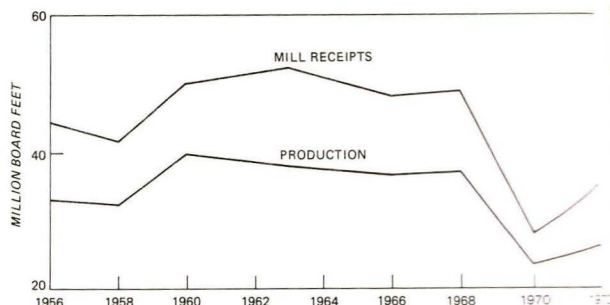


Figure 4.--Veneer-log production and mill receipts in the Central States, 1956-1972.

From 1956 to 1972 veneer-log receipts in the Central States peaked at 52.2 million board feet (in 1963) and reached a low of 28.0 million board feet (in 1970). During these years, the Central States veneer industry has imported many of its logs from other areas.

Production

Excellent fine hardwood veneer markets in such industries as furniture, kitchen cabinets, and other home furnishings sparked a rise in standard veneer-log production from 16.9 million board feet in 1970 to 21.8 million board feet in 1972. Meanwhile, the container veneer-log harvest plunged from 6.6 million board feet in 1970 to 4.4 million board feet in 1972.

Ten million board feet of walnut veneer logs were cut in 1972. Other important species harvested were cottonwood, white oak, and pecan. The major changes in the veneer-log harvest were as follows:

Harvest change, 1970-1972
Species (Thousand board feet) (Percent)

Walnut	+1,865	+23
White oak	+1,651	+99
Cottonwood	-1,272	-27
Pecan	+ 882	+58

Indiana forests furnished about half (13.5 million board feet) of the veneer-log volume harvested in the Central States in 1972 and 2.3 million board feet more than in 1970. Harvesting of veneer logs increased over 1970 in every State except Iowa. Exports were 5.3 million board feet from the Central States in 1972, mainly to Kentucky (42 percent), Wisconsin (29 percent), and Ohio (26 percent).

Receipts

Central States mills received 35.1 million board feet of veneer logs in 1972, an increase of 7.1 million board feet compared to 1970. These mills imported 14.2 million board feet of logs from other widespread areas including more than 1 million board feet each from Kentucky, Ohio, Oklahoma,

Michigan, Tennessee, Mississippi, Wisconsin, and Pennsylvania. Kentucky was an important supplier of walnut, Oklahoma and Mississippi of pecan, and Pennsylvania of black cherry.

Species in greatest demand by Central States veneer mills in 1972 were walnut, pecan, cottonwood, and white oak. White oak receipts were slightly more than double those in 1970, while pecan receipts rose 90 percent. Both are important furniture veneer species.

Central and southern Indiana has a large concentration of veneer mills; consequently, Indiana received 76 percent of the log receipts in the Central States, including 8.8 million board feet of walnut and more than 99 percent of the white oak.

Plant Residue

Only 13 percent of the wood residue and 12 percent of the bark was disposed of as waste. Industrial fuel was the main use for both wood and bark residue. About one-eighth of the wood residue was consumed at pulp mills. As in the Lake States, disposal of plant residue does not seem to be a significant problem for the veneer industry, unless higher value uses are needed.

Table 1.--Production and imports of veneer logs, Lake States, 1972
(In thousand board feet, International
1/4-inch log rule)

SPECIES AND DESTINATION	PRODUCTION BY STATES 1/				IMPORTS			TOTAL RECEIPTS 2/
	REGIONAL				OTHER		TOTAL	
	MICHIGAN	MINNESOTA	WISCONSIN	TOTAL	U.S.	CANADA	IMPORTS	
PINE								
WISCONSIN	3	0	45	48	0	0	0	48
TOTAL	3	0	45	48	0	0	0	48
ASH								
MICHIGAN	128	0	0	128	0	0	0	128
MINNESOTA	0	10	0	10	0	0	0	10
WISCONSIN	107	50	302	459	32	0	32	491
EXPORTED 3/	6	0	0	6	0	0	0	0
TOTAL	241	60	302	603	32	0	32	629
ASPEN								
MICHIGAN	214	0	0	214	0	0	0	214
MINNESOTA	0	26	0	26	0	0	0	26
WISCONSIN	38	15	2110	2163	0	0	0	2163
EXPORTED 3/	0	155	0	155	0	0	0	0
TOTAL	252	196	2110	2558	0	0	0	2493
BASSWOOD								
MICHIGAN	306	0	0	306	0	0	0	306
MINNESOTA	0	133	0	133	0	0	0	133
WISCONSIN	318	470	1621	2409	252	0	252	2661
EXPORTED 3/	25	0	0	25	0	0	0	0
TOTAL	649	603	1621	2873	252	0	252	3100
BEECH								
MICHIGAN	178	0	0	178	0	0	0	178
WISCONSIN	493	0	47	540	0	30	30	570
EXPORTED 3/	347	0	0	347	0	0	0	0
TOTAL	1018	0	47	1065	0	30	30	748
BLACK CHERRY								
MICHIGAN	22	0	0	22	0	0	0	22
WISCONSIN	31	22	50	103	3	0	3	106
EXPORTED 3/	26	0	0	26	0	0	0	0
TOTAL	79	22	50	151	3	0	3	128
BUTTERNUT								
WISCONSIN	0	0	2	2	0	0	0	2
EXPORTED 3/	0	19	325	344	0	0	0	0
TOTAL	0	19	327	346	0	0	0	2
COTTONWOOD								
MICHIGAN	570	0	0	570	0	0	0	570
MINNESOTA	0	82	0	82	0	0	0	82
WISCONSIN	0	510	106	616	8	0	8	624
TOTAL	570	592	106	1268	8	0	8	1276
ELM								
MICHIGAN	144	0	11	155	0	0	0	155
MINNESOTA	0	5	0	5	0	0	0	5
WISCONSIN	794	625	3440	4859	236	0	236	5095
EXPORTED 3/	1	0	78	79	0	0	0	0
TOTAL	939	630	3529	5098	236	0	236	5255
HARD MAPLE								
MICHIGAN	1183	0	0	1183	0	44	44	1227
MINNESOTA	0	15	26	41	0	0	0	41
WISCONSIN	4681	80	1881	6642	161	1350	1511	8153
EXPORTED 3/	1257	0	132	1389	0	0	0	0
TOTAL	7121	95	2039	9255	161	1394	1555	9421

TABLE 1 CONTINUED ON NEXT PAGE

TABLE 1 CONTINUED

PAPER BIRCH	798	22	44	864	0	154	154	1018
MICHIGAN	25	200	123	348	0	91	91	479
WISCONSIN	0	11	0	11	0	0	0	0
EXPORTED 3/								
TOTAL	823	233	167	1223	0	245	245	1457
PECAN								
MICHIGAN	4	0	0	4	0	0	0	4
WISCONSIN	82	0	0	82	0	0	0	0
EXPORTED 3/								
TOTAL	86	0	0	86	0	0	0	4
RED OAK								
MICHIGAN	109	0	0	109	0	0	0	109
MINNESOTA	0	26	0	26	0	0	0	26
WISCONSIN	816	1215	7094	9125	759	70	829	9954
EXPORTED 3/	402	24	17	443	0	0	0	0
TOTAL	1327	1265	7111	9703	759	70	829	10049
SOFT MAPLE								
MICHIGAN	205	0	0	205	0	0	0	205
MINNESOTA	0	118	10	128	26	0	26	154
WISCONSIN	106	169	414	689	96	41	137	826
EXPORTED 3/	18	0	0	18	0	0	0	0
TOTAL	329	287	424	1040	122	41	163	1185
WALNUT								
EXPORTED 3/	624	113	639	1376	0	0	0	0
TOTAL	624	113	639	1376	0	0	0	0
WHITE OAK								
WISCONSIN	2	23	172	197	5	0	5	202
EXPORTED 3/	90	0	0	90	0	0	0	0
TOTAL	92	23	172	287	5	0	5	202
YELLOW BIRCH								
MICHIGAN	704	11	11	726	0	462	462	1188
MINNESOTA	0	5	0	5	0	0	0	5
WISCONSIN	3479	78	764	4321	0	835	835	5156
EXPORTED 3/	135	0	0	135	0	0	0	0
TOTAL	4318	94	775	5187	0	1297	1297	6349
YELLOW-POPLAR								
WISCONSIN	0	0	1	1	0	0	0	1
EXPORTED 3/	4	0	0	4	0	0	0	0
TOTAL	4	0	1	5	0	0	0	1
OTHER HARDWOODS								
EXPORTED 3/	4	0	0	4	0	0	0	0
TOTAL	4	0	0	4	0	0	0	0
ALL SPECIES								
MICHIGAN	4565	33	66	4664	0	660	660	5324
MINNESOTA	0	420	36	456	26	0	26	482
WISCONSIN	10893	3457	18172	32522	1552	2417	3969	36491
EXPORTED 3/	3021	322	1191	4534	0	0	0	0
TOTAL	18479	4232	19465	42176	1578	3077	4655	42297

1/ VERTICAL COLUMNS OF FIGURES UNDER BOX HEADING "PRODUCTION BY STATES" PRESENT THE AMOUNT OF VENEER LOGS CUT IN EACH STATE.

2/ PRODUCTION MINUS EXPORTS PLUS IMPORTS.

3/ VENEER LOGS SHIPPED TO STATES OUTSIDE THE LAKE STATES AND TO CANADA.

Table 2.--Mills using four species of Lake States veneer logs, by location, 1972
(In numbers)

Location	: Red oak	: Hard maple	: Yellow birch	: Elm
Lake States	16	16	10	20
Indiana	4	7	1	2
Illinois	--	1	--	--
Ohio	1	3	--	--
Kentucky	1	1	--	--
Canada	--	--	1	--
Total	22	28	12	22

Table 3.--Veneer-log production and receipts in the Lake States by species, 1970 and 1972

Species	Production			Receipts		
	: 1970	: 1972	: Change	: 1970	: 1972	: Change
	<u>Thousand</u> <u>board feet</u> ^{1/}		<u>Percent</u>	<u>Thousand</u> <u>board feet</u> ^{1/}		<u>Percent</u>
Ash	350	603	+ 72	354	629	+ 78
Aspen	1,272	2,558	+101	1,272	2,403	+ 89
Basswood	3,268	2,873	- 12	3,570	3,100	- 13
Beech	293	1,065	+263	293	748	+155
Black cherry	101	151	+ 50	68	128	+ 88
Butternut	329	346	+ 5	8	2	- 75
Cottonwood	1,301	1,268	- 3	1,398	1,276	- 9
Elm	3,775	5,098	+ 35	3,820	5,255	+ 38
Hard maple	8,782	9,255	+ 5	9,007	9,421	+ 5
Paper birch	1,161	1,223	+ 5	1,927	1,457	- 24
Pecan	21	86	+310	154	4	- 97
Red oak	6,830	9,730	+ 42	7,650	10,089	+ 32
Soft maple	827	1,040	+ 26	911	1,185	+ 30
Walnut	559	1,376	+146	--	--	--
White oak	290	287	- 1	197	202	+ 3
Yellow birch	4,466	5,187	+ 16	6,130	6,349	+ 4
Other species	726	57	- 92	256	49	- 81
Total	34,351	42,176	+ 23	37,015	42,297	+ 14

^{1/} International 1/4-inch log rule.

Table 4.--*Veneer-log production by species group for selected years,
Lake States, 1946-1972*
(In million board feet)¹

Year	Ash	Aspen	Bass- wood	Beech	Yellow birch	Cotton- wood	Elm	Hard maple	Soft maple	Red oak	White oak	Paper birch	Walnut	Other species	All species
1946	2.3	4.0	10.4	5.6	<u>2/</u> 26.8	0.4	16.6	<u>3/</u> 40.3	--	<u>4/</u> 3.1	--	--	--	<u>5/</u> 1.1	110.6
1952	--	1.4	10.4	3.1	<u>2/</u> 18.2	--	11.5	<u>3/</u> 23.8	--	<u>4/</u> 5.1	--	--	--	<u>5/</u> 4.7	78.2
1954	.8	.3	9.2	3.2	<u>2/</u> 17.3	2.7	10.5	<u>3/</u> 20.9	--	<u>4/</u> 5.5	--	--	--	1.6	72.0
1956	.7	.8	10.3	5.7	<u>2/</u> 20.3	2.1	9.6	20.1	3.7	<u>4/</u> 4.5	--	--	.3	.9	79.0
1958	.6	1.7	7.1	1.8	<u>2/</u> 13.1	2.2	8.9	9.7	2.2	<u>4/</u> 4.8	--	--	.2	.4	52.7
1960	1.0	2.1	6.2	1.0	<u>2/</u> 14.1	1.9	5.1	10.9	2.9	<u>4/</u> 7.6	--	--	.6	.6	54.0
1963	.6	1.5	6.6	.3	<u>2/</u> 10.9	.4	5.7	10.5	2.2	<u>4/</u> 8.9	--	--	2.3	.6	50.5
1965	.7	.6	6.0	.5	<u>2/</u> 11.3	1.4	6.3	11.8	1.8	<u>4/</u> 9.0	--	--	.9	1.4	51.7
1966	1.1	.7	4.5	.5	<u>2/</u> 9.5	1.4	5.7	13.1	1.5	9.1	.3	--	1.5	2.0	50.9
1968	1.0	.6	3.6	.5	8.3	1.4	5.4	9.4	1.2	8.2	.5	1.9	1.7	1.8	45.5
1970	.4	1.3	3.2	.3	4.4	1.3	3.8	8.8	.8	6.8	.3	1.2	.6	1.2	34.4
1972	.6	2.6	2.9	1.1	5.2	1.3	5.1	9.2	1.0	9.7	.3	1.2	1.4	.6	42.2

1/ International 1/4-inch log rule.

2/ Includes paper birch.

3/ Includes soft maple.

4/ Includes white oak.

5/ Includes ash and cottonwood.

Table 5.--*Veneer-log production for selected
years and type of industry, Lake States,
1946-1972*
(In million board feet)¹

Year	Standard	Container	Total
1946	72.7	37.9	110.6
1948	71.7	45.1	116.8
1950	47.3	39.3	86.6
1952	46.8	31.4	78.2
1954	45.3	26.7	72.0
1956	51.6	27.4	79.0
1958	40.3	12.4	52.7
1960	46.5	7.5	54.0
1962	41.0	6.6	47.6
1963	43.9	6.6	50.5
1965	44.6	7.1	51.7
1966	45.0	5.9	50.9
1968	40.6	4.9	45.5
1970	29.4	5.0	34.4
1972	38.0	4.2	42.2

1/ International 1/4-inch log rule.

Table 6.--Lake States veneer-log production, receipts, exports, and imports for selected years, 1946-1972
(In million board feet)¹

Year	: Produced in the Lake : States and received : at Lake States Mills	: Exported ^{2/}	: Imported ^{3/}	: Total : production in : Lake States	: Total : receipts in : Lake States
1946	109.7	0.9	5.9	110.6	115.6
1948	116.0	.8	12.0	116.8	128.0
1950	86.0	.6	15.7	86.6	101.7
1952	77.8	.4	12.1	78.2	89.9
1954	71.6	.4	12.1	72.0	83.7
1956	78.7	.3	13.4	79.0	92.1
1958	51.5	1.2	6.0	52.7	57.5
1960	51.9	2.1	12.5	54.0	64.4
1963	45.0	5.5	7.7	50.5	52.7
1965	49.0	2.7	7.6	51.7	56.6
1966	45.8	5.1	9.6	50.9	55.4
1968	39.7	5.8	7.9	45.5	47.6
1970	31.4	3.0	5.6	34.4	37.0
1972	37.7	4.5	4.6	42.2	42.3

^{1/} International 1/4-inch log rule.

^{2/} From Lakes States to other States and Canada.

^{3/} From other States and Canada into Lakes States.

Table 7.--Veneer-log receipts in the Lake States by species groups for selected years, 1952-1972
(In million board feet)¹

Year	: Ash	: Aspen	: Bass- : wood	: Beech	: Yellow : birch	: Cotton- : wood	: Elm	: Hard : maple	: Soft : maple	: Red : oak	: White : oak	: Paper : birch	: Other : species	: All : species
1952	--	1.4	10.9	3.2	^{2/} 27.1	--	11.7	^{3/} 24.9	--	^{4/} 5.3	--	--	^{5/} 5.4	89.9
1954	.8	.3	10.3	3.2	^{2/} 25.0	2.7	10.9	^{3/} 22.4	--	^{4/} 6.5	--	--	1.6	83.7
1956	.7	.8	10.6	5.7	^{2/} 28.5	3.0	10.2	21.9	4.7	^{4/} 5.0	--	--	1.0	92.1
1958	.6	1.7	7.3	1.8	^{2/} 17.2	2.2	9.2	9.6	2.5	^{4/} 5.0	--	--	.4	57.5
1960	1.1	2.1	6.8	.9	^{2/} 18.9	3.3	6.2	12.2	3.6	^{4/} 8.4	--	--	.9	64.4
1963	.7	1.6	6.7	.3	^{2/} 14.3	.7	4.9	11.1	2.6	^{4/} 9.3	--	--	.5	52.7
1965	.7	.6	6.3	.5	^{2/} 14.5	2.1	6.3	13.2	1.9	^{4/} 9.3	--	--	1.2	56.6
1966	1.1	.7	4.8	.5	^{2/} 14.7	2.3	5.8	12.8	1.8	9.7	.2	--	1.0	55.4
1968	1.0	.6	3.9	.5	10.2	2.1	5.2	9.0	1.3	8.3	.2	4.0	1.3	47.6
1970	.3	1.3	3.6	.3	6.1	1.4	3.8	9.0	.9	7.7	.2	1.9	.5	37.0
1972	.6	2.4	3.1	.7	6.3	1.3	5.3	9.4	1.2	10.1	.2	1.5	.2	42.3

^{1/} International 1/4-inch log rule.

^{2/} Includes paper birch.

^{3/} Includes soft maple.

^{4/} Includes white oak.

^{5/} Includes ash and cottonwood.

Table 8.--*Production and disposition of hardwood veneer plant residue by type of residue and use, Lake States, 1972*

(In thousand cubic feet)

State and type of use	Wood residue			
	Total	Coarse ^{1/}	Fine ^{2/}	Bark
Michigan				
Fiber products	30.0	30.0	--	--
Industrial fuel	290.1	76.4	213.7	135.2
Domestic fuel	16.8	16.8	--	--
Miscellaneous ^{3/}	25.9	25.9	--	--
Not used ^{4/}	26.0	--	26.0	30.0
Total	388.8	149.1	239.7	165.2
Minnesota				
Industrial fuel	4.3	3.8	.5	2.5
Domestic fuel	8.8	8.8	--	9.0
Miscellaneous ^{3/}	5.4	--	5.4	--
Not used ^{4/}	16.7	.9	15.8	3.5
Total	35.2	13.5	21.7	15.0
Wisconsin				
Fiber products	1,451.7	702.1	749.6	--
Industrial fuel	1,001.6	171.2	830.4	905.4
Domestic fuel	8.5	8.5	--	--
Miscellaneous ^{3/}	152.9	133.9	19.0	--
Not used ^{4/}	45.8	4.7	41.1	224.2
Total	2,660.5	1,020.4	1,640.1	1,129.6
All States				
Fiber products	1,481.7	732.1	749.6	--
Industrial fuel	1,296.0	251.4	1,044.6	1,043.1
Domestic fuel	34.1	34.1	--	9.0
Miscellaneous ^{3/}	184.2	159.8	24.4	--
Not used ^{4/}	88.5	5.6	82.9	257.7
Total	3,084.5	1,183.0	1,901.5	1,309.8

^{1/} Suitable for chipping such as veneer cores.

^{2/} Not suitable for chipping such as veneer clippings.

^{3/} Livestock bedding, mulch, small dimension and specialty items.

^{4/} Including residues burned as waste.

Table 9.--Production and imports of veneer logs, Central States, 1972
(In thousand board feet, International
1/4-inch log rule)

SPECIES AND DESTINATION	PRODUCTION BY STATES 1/					IMPORTS			TOTAL RECEIPTS
	ILLINOIS	INDIANA	IOWA	MISSOURI	REGIONAL TOTAL	LAKE STATES	OTHER U.S.	TOTAL IMPORTS	
ASH									
INDIANA	3	266	0	0	269	1	193	194	
ILL.+IOWA+MO.	0	0	79	0	79	0	0	0	
EXPORTED 3/	0	12	32	0	44	0	0	0	
TOTAL	3	278	111	0	392	1	193	194	
BASSWOOD									
INDIANA	0	11	0	0	11	23	2	25	
EXPORTED 3/	0	0	252	0	252	0	0	0	
TOTAL	0	11	252	0	263	23	2	25	
BLACK CHERRY									
INDIANA	2	81	0	0	83	21	550	571	
ILL.+IOWA+MO.	0	0	0	0	0	0	201	201	
EXPORTED 3/	0	0	3	0	3	0	0	0	
TOTAL	2	81	3	0	86	21	751	772	
BUTTERNUT									
INDIANA	0	2	17	0	19	312	7	319	
ILL.+IOWA+MO.	0	0	24	0	24	19	0	19	
TOTAL	0	2	41	0	43	331	7	338	
COTTONWOOD									
INDIANA	0	1122	0	0	1122	0	33	33	
ILL.+IOWA+MO.	1804	0	0	468	2272	0	1428	1428	
EXPORTED 3/	0	0	84	0	84	0	0	0	
TOTAL	1804	1122	84	468	3478	0	1461	1461	
ELM									
INDIANA	1	54	0	0	55	79	4	83	
ILL.+IOWA+MO.	0	0	204	0	204	0	0	0	
EXPORTED 3/	0	0	236	0	236	0	0	0	
TOTAL	1	54	440	0	495	79	4	83	
GUM									
INDIANA	33	446	0	0	479	0	55	55	
ILL.+IOWA+MO.	11	0	0	0	11	0	61	61	
TOTAL	44	446	0	0	490	0	116	116	
HARD MAPLE									
INDIANA	7	567	33	0	607	910	870	1780	
ILL.+IOWA+MO.	0	0	22	0	22	12	4	16	
EXPORTED 3/	0	346	161	0	507	0	0	0	
TOTAL	7	913	216	0	1136	922	874	1796	
PECAN									
INDIANA	518	354	0	61	933	30	3466	3496	
ILL.+IOWA+MO.	0	0	569	593	1162	0	99	99	
EXPORTED 3/	24	279	0	0	303	0	0	0	
TOTAL	542	633	569	654	2398	30	3565	3595	

TABLE 9 CONTINUED ON NEXT PAGE

TABLE 9 CONTINUED

PED OAK									
INDIANA	79	510	0	0	589	283	449	732	1321
ILL., IOWA, MO.	11	0	176	0	187	0	61	61	248
EXPORTED 3/	15	192	744	0	951	0	0	0	0
TOTAL	105	702	920	0	1727	283	510	793	1669
SOFT MAPLE									
INDIANA	0	285	0	0	285	0	11	11	296
ILL., IOWA, MO.	32	0	0	6	38	0	181	181	219
EXPORTED 3/	0	0	122	0	122	0	0	0	0
TOTAL	32	285	122	6	445	0	192	192	515
SYCAMORE									
INDIANA	0	616	0	0	616	0	55	55	671
ILL., IOWA, MO.	11	0	0	55	66	0	117	117	183
TOTAL	11	616	0	55	682	0	172	172	854
WALNUT									
INDIANA	1651	3538	492	829	6510	551	1748	2299	8809
ILL., IOWA, MO.	459	0	526	282	1267	438	470	908	2175
EXPORTED 3/	310	1027	220	670	2227	0	0	0	0
TOTAL	2420	4565	1238	1781	10004	989	2218	3207	10984
WHITE OAK									
INDIANA	420	2179	0	98	2697	61	1264	1325	4022
ILL., IOWA, MO.	4	0	8	0	12	0	0	0	12
EXPORTED 3/	132	408	11	54	605	0	0	0	0
TOTAL	556	2587	19	152	3314	61	1264	1325	4034
YELLOW BIRCH									
INDIANA	0	0	0	0	0	13	0	13	13
TOTAL	0	0	0	0	0	13	0	13	13
YELLOW-POPLAR									
INDIANA	7	1129	0	0	1136	2	93	95	1231
EXPORTED 3/	0	14	0	0	14	0	0	0	0
TOTAL	7	1143	0	0	1150	2	93	95	1231
OTHER HARDWOODS									
INDIANA	24	85	0	0	109	4	11	15	124
TOTAL	24	85	0	0	109	4	11	15	124
ALL SPECIES									
INDIANA	2745	11245	542	988	15520	2290	8811	11101	26621
ILL., IOWA, MO.	2332	0	1608	1404	5344	469	2622	3091	8435
EXPORTED 3/	481	2278	1865	724	5348	0	0	0	0
TOTAL	5558	13523	4015	3116	26212	2759	11433	14192	35056

1/ VERTICAL COLUMNS OF FIGURES UNDER BOX HEADING "PRODUCTION BY STATES" PRESENT THE AMOUNT OF VENEER LOGS CUT IN EACH STATE.

2/ PRODUCTION MINUS EXPORTS PLUS IMPORTS.

3/ VENEER LOGS SHIPPED TO STATES OUTSIDE THE LAKE STATES AND TO CANADA.

Table 10.--Veneer-log production and receipts in the Central States
by species, 1970 and 1972

Species	Production			Receipts		
	: 1970	: 1972	: Change	: 1970	: 1972	: Change
	Thousand bd. ft. ^{1/}		Percent	Thousand bd. ft. ^{1/}		Percent
Ash	296	392	+32	434	542	+ 25
Basswood	322	263	-18	25	36	+ 44
Black cherry	78	86	+10	190	855	+350
Butternut	128	43	-66	452	381	- 16
Cottonwood	4,750	3,478	-27	4,749	4,855	+ 2
Elm	556	495	-11	476	342	- 28
Gum	669	490	-27	831	606	- 27
Hard maple	796	1,136	+43	1,331	2,425	+ 82
Pecan	1,516	2,398	+58	2,994	5,690	+ 90
Red oak	1,279	1,727	+35	841	1,569	+ 87
Soft maple	550	445	-19	612	515	- 16
Sycamore	1,302	682	-48	1,362	854	- 37
Walnut	8,139	10,004	+23	9,978	10,984	+ 10
White oak	1,663	3,314	+99	1,965	4,034	+105
Yellow-poplar	849	1,150	+35	1,055	1,231	+ 17
Other species	641	109	-83	661	137	- 79
Total	23,534	26,212	+11	27,956	35,056	+ 25

^{1/} International 1/4-inch log rule.

Table 11.--Veneer-log production by species groups for selected years,
Central States, 1956-1972
(In million board feet)¹

Year	Cotton- wood	Elm	Hard maple	Hickory	Red oak	Soft maple	Sycamore	Walnut	White oak	Yellow- poplar	Other species	All species
1956	8.0	0.9	0.8	0.1	1.1	1.8	0.6	10.6	3.4	1.6	4.2	33.1
1958	8.9	.6	1.1	.1	1.0	.5	.5	10.8	2.6	1.1	5.2	32.4
1960	11.2	2.0	1.2	.1	1.5	1.2	2.5	13.2	1.6	1.6	3.8	39.9
1963	7.4	.7	1.6	.8	.9	1.0	1.8	15.5	1.4	2.3	4.6	38.0
1966	6.2	<u>2/</u> .7	1.4	1.1	2.3	.5	1.0	14.	1.9	3.0	3.9	36.7
1968	4.1	.7	1.3	3.0	2.1	.4	1.2	16.1	3.6	1.3	3.2	37.0
1970	4.8	.6	.8	<u>3/</u> 1.5	1.3	.5	1.3	8.1	1.7	.8	2.1	23.5
1972	3.5	.5	1.1	<u>3/</u> 2.4	1.7	.4	.7	10.0	3.3	1.2	1.4	26.2

1/ International 1/4-inch log rule.

2/ Estimated.

3/ Pecan hickory only.

Table 12.--Veneer-log receipts by species groups for selected years,
Central States, 1956-1972
(In million board feet)¹

Year	Cotton- wood	Elm	Hard maple	Hickory	Red oak	Soft maple	Sycamore	Walnut	White oak	Yellow- poplar	Other species	All species
1956	10.9	0.8	1.2	0.6	1.3	0.8	1.3	11.4	6.7	2.8	6.6	44.4
1958	10.2	.6	1.7	.3	1.3	.3	1.2	13.0	4.8	1.9	6.3	41.6
1960	10.4	1.0	2.9	.2	1.4	.5	2.3	17.1	3.6	2.8	8.0	50.2
1963	8.6	1.0	3.1	1.6	.9	.8	2.0	21.2	2.3	2.8	7.9	52.2
1966	6.7	<u>2/</u> 1.0	3.6	1.6	2.0	.4	1.2	17.9	2.1	4.4	7.3	48.2
1968	5.7	1.0	2.7	4.9	2.3	.5	1.1	18.4	5.2	1.9	5.1	48.8
1970	4.7	.5	1.3	<u>3/</u> 3.0	.8	.6	1.4	10.0	2.0	1.1	2.6	28.0
1972	4.9	.3	2.4	<u>3/</u> 5.7	1.6	.5	.9	11.0	4.0	1.2	2.6	35.1

1/ International 1/4-inch log rule.

2/ Estimated.

3/ Pecan hickory only.

Table 13.--*Production and disposition of hardwood veneer plant residue by type of residue and use, Central States, 1972*

(In thousand cubic feet)

State and type of use	Wood residue			
	Total	Coarse ^{1/}	Fine ^{2/}	Bark
Illinois, Iowa, and Missouri				
Fiber products	96.3	41.5	54.8	--
Charcoal	4.6	4.6	--	--
Industrial fuel	175.5	50.8	124.7	135.0
Domestic fuel	4.2	4.2	--	6.1
Miscellaneous ^{3/}	99.9	87.8	12.1	--
Not used ^{4/}	235.5	47.4	188.1	120.4
Total	616.0	236.3	379.7	261.5
Indiana				
Fiber products	220.5	126.9	93.6	--
Industrial fuel	1,314.7	409.0	905.7	621.7
Domestic fuel	167.7	83.5	84.2	58.0
Miscellaneous ^{3/}	144.4	123.4	21.0	136.8
Not used ^{4/}	96.1	2.6	93.5	8.7
Total	1,943.4	745.4	1,198.0	825.2
All States				
Fiber products	316.8	168.4	148.4	--
Charcoal	4.6	4.6	--	--
Industrial fuel	1,490.2	459.8	1,030.4	756.7
Domestic fuel	171.9	87.7	84.2	64.1
Miscellaneous ^{3/}	244.3	211.2	33.1	136.8
Not used ^{4/}	331.6	50.0	281.6	129.1
Total	2,559.4	981.7	1,577.7	1,086.7

^{1/} Suitable for chipping such as veneer cores.

^{2/} Not suitable for chipping such as veneer clippings.

^{3/} Livestock bedding, mulch, small dimension and specialty items.

^{4/} Including residues burned as waste.

Blyth, James E.

1974. Veneer-log production and receipts, North Central Region,
1972. North Cent. For. Exp. Stn., St. Paul, Minn. 16 p.,
illus. (USDA For. Serv. Resour. Bull. NC-23)

Shows 1972 veneer-log production and receipts by species in the Lake States (Michigan, Minnesota, and Wisconsin) and in the Central States (Illinois, Indiana, Iowa, and Missouri). Comparisons are made with similar data for 1970. Includes tables showing veneer-log production and receipts (for selected years) since 1946 in the Lake States and since 1956 in the Central States.

OXFORD: 832.20:792(77). KEY WORDS: imports, exports, plant residue, veneer mills.

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